# LASER RANGEFINDER/HYPSOMETER LH



**USER MANUAL** 

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You are welcome to visit our site

# www.latronix.se

You will find more information about our company and products!

Thank you for purchasing our distance meter

Serial number for your product is:

## Warranty

Latronix warrants that the above product will be free from defects in workmanship and materials, under normal use, for 12 months from delivery date.

Latronix will, under this warranty period, at Latronix expense, replace or repair the product or part of it. All products or parts that are replaced become the property of Latronix AB.

## **LH SERIES LASER DISTANCEMETER**

is the perfect instrument for policeman, fire fighters and other rescue workers, engineers, construction workers, crane workers, hunters, golfers etc.

### Usage

The easy-to-use, ergonomically designed and price worthy distance meter eliminates guesses allowing easy, fast and accurate measuring of distance, height and angles.

## 1 Product description

#### Viewfinder

Look through the viewfinder and aim the red laser dot on the measuring object. The laser dot is visible only in the viewfinder, not on the object. The measurement is performed with a harmless and non-visible (IR) infrared laser beam.

### Range button

Press the range button to take distance or height measurements, or to select modes.

### **Display**

The laser rangefinders 400LH, 800LH and 1000LH are user programmable to read in either feet, meters or yards. Five mode functions are available for Line-of-Sight distance, Horisontal distance, height measurement in 2 points, height measurement in 3 points and angle measurement in degrees or percent.

#### Sound icon

The sound icon indicates that the sound is active for every taken measurement. The sound can be activated or deactivated by the user. (Notice! Just for some models)

### Low battery level

Replace the battery when the low battery symbol is displayed constantly.

#### **Automatic timeout**

To save batteries, the instrument will automatically time out after about 7 seconds.

### 7 General care

The distance meter is a sophisticated electronic and optical instrument built to withstand a reasonable amount of handling with the same amount of care as any other optical or electrical devices, such as a camera, binocular, telescope etc. Keeping the lens clean will insure optimum operation and performance. Use a soft, clean non-abrasive cloth to clean the lenses. Never use paper or other abrasive materials. Dampen a cloth with either a very mild soap solution or clean water. Gently rub the lenses with a dampened cloth. Do not scrub the lenses. After cleaning the lenses, gently wipe the lenses off with a soft dry cloth. **Never** use petroleum products or chemicals to clean the lenses or any parts. Use the same procedure to clean the exteriors. Never subject your laser rangefinder to shock, high temperature or harmful chemicals or gases. If the rangefinder is not going to be used for long periods of time, remove the battery and store in a cool, dry place.

# 8 Technical support

For questions regarding our laser rangefinders, usage and technical questions please contact us.

#### LATRONIX AB

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If your range finder dosn't show any dinstance check if the red dot laser is aimed correctly and is hitting the object. Try to measure a shorter distance or a target with better reflectivity as e.g. a road sign.

If your range finder is showing "0" than the distance is closer that the minimum range. Try to hit an object farther away.

# 7 Technical specifications

Model	400LH	800LH	1000LH
Measuring range (m)	4 - 365	4 - 550	4 – 735
With reflector (m)	900	1100	1300
Accuracy (m)	±0,5	±0,5	±0,5
Measuring unit	User selectable in either feet, meters		
	or yards.		

Display Easy to read external LCD display.

The InSigth series rangefinders shows the distance even in the

viewfinder.

Battery Single 9V battery. Operates for

approximately 1000 readings.

Laser type Infrared Class 1, eye safe 905nm

laser.

Temperature range 0°C till +40°C



The measured distance is shown even in the viewfinder.

## 2 MODE description and functions

The LH series range finders provides user-selectable display units and allows the user to select between five different modes, Line-of-Sight distance, horisontal distance, height measurement in 2 points, height measurements in 3 points and vertical angle measurements.

You can even set the instrument for measuring in meters, feet or yards, for measuring against natural surfaces or reflector mode (an R is shown in the display).

To enable the mode selection process hold the firing button down for approx. 6-8 seconds until a double-beep is heard. Immediately release the button, than repeatedly press and release the button to scroll through menu options. The mode options will toggle as follows:

**Mode 0:** Line-of-Sight distance. Press the range button to activate the red dot aiming device and place it on the target. Release the button and wait for a single beep. When the beep sounds read the distance in the external LCD.



**Mode 1:** Tilt compensated horisontal distance. Press the range button to activate the red dot aiming device and place it on the target. Release the button and wait for a single beep followed by a double beep. Do not move the unit until the second beep sounds. After the unit takes its distance measurement, it must take an angle measurement. When the double beep sounds, read the distance in the LCD.



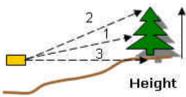
**Mode 1:** Tilt compensated horisontal distance. Press the range button to activate the red dot aiming device and place it on the target. Release the button and wait for a single beep followed by a double beep. Do not move the unit until the second beep sounds. After the unit takes its distance measurement, it must take an angle measurement. When the double beep sounds, read the distance in the LCD.



**Mode 2:** Height measurement in two points. This mode requires measurement in two points, top and bottom, in that order.



**Mode 3:** Height measurement in tree points. This mode requires tree measurements, center, top and bottom, in that order.



**Mode 4:** Angle measurement. To determine the angle or slope, press and hold the range button, place the red dot on the point to be measured, release the button and wait for the beep to sound before lowering the unit. Read the angle in degrees (deg icon in the LED) or percent grade (no icon).

# 3 Changing the battery

- a. Slide the locking tab on the side of the instrument forward (toward the lenses).
- b. Using your thumbnail, gently pry out the battery door using the locking tab.
- c. Pull on the cloth ribbon and the battery will pop out.
- d. Replace the battery. The battery direction is shown in the battery compartment. Replace and lock battery door using the slide lock.

## 4 Measuring unit

The LH series laser rangefinders allows the user to select the measuring unit in feet, meters or yards. För att kunna göra ovanstående val, håll tryckknappen nedtryckt 6-8 sekunder tills en ljudsignal hörs. To enable the mode selection process hold the firing button down for approx. 6-8 seconds until a double-beep is heard. Immediately release the button, than repeatedly press and release the button to scroll through the menu options.

#### 5 Error

When a new battery is installed in your rangefinder, diagnostics checks are performed by the onboard computer. These tests check the basic operation of the rangefinder. During the normal diagnostic the display cycles from "000" to "999" then the display clears and is followed by a single beep.

If the unit is unable to obtain a range or angle measurement there are a few steps you can take to correct this:

- Remove the battery for several seconds and press the range button with no battery installed, than reinstall the battery.
- Make sure that the red dot in the viewfinder is hitting the object. Try aiming the rangefinder to a nearby reflective target such as a street sign or automobile license plate to verify alignment.
- Make sure the battery terminals are in contact with the metal battery clips when replacing the old battery.